

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: E428403

Luminaire Tested: **M700-740-1705BA**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: E428403  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: M700-740-1705BA  
Description: HALO RECESSED HID - LITE COMMERCIAL, BAFFLE REFL, HIGH SS  
Light Source: M100C, 8000 LUMENS  
Ballast/Driver: -

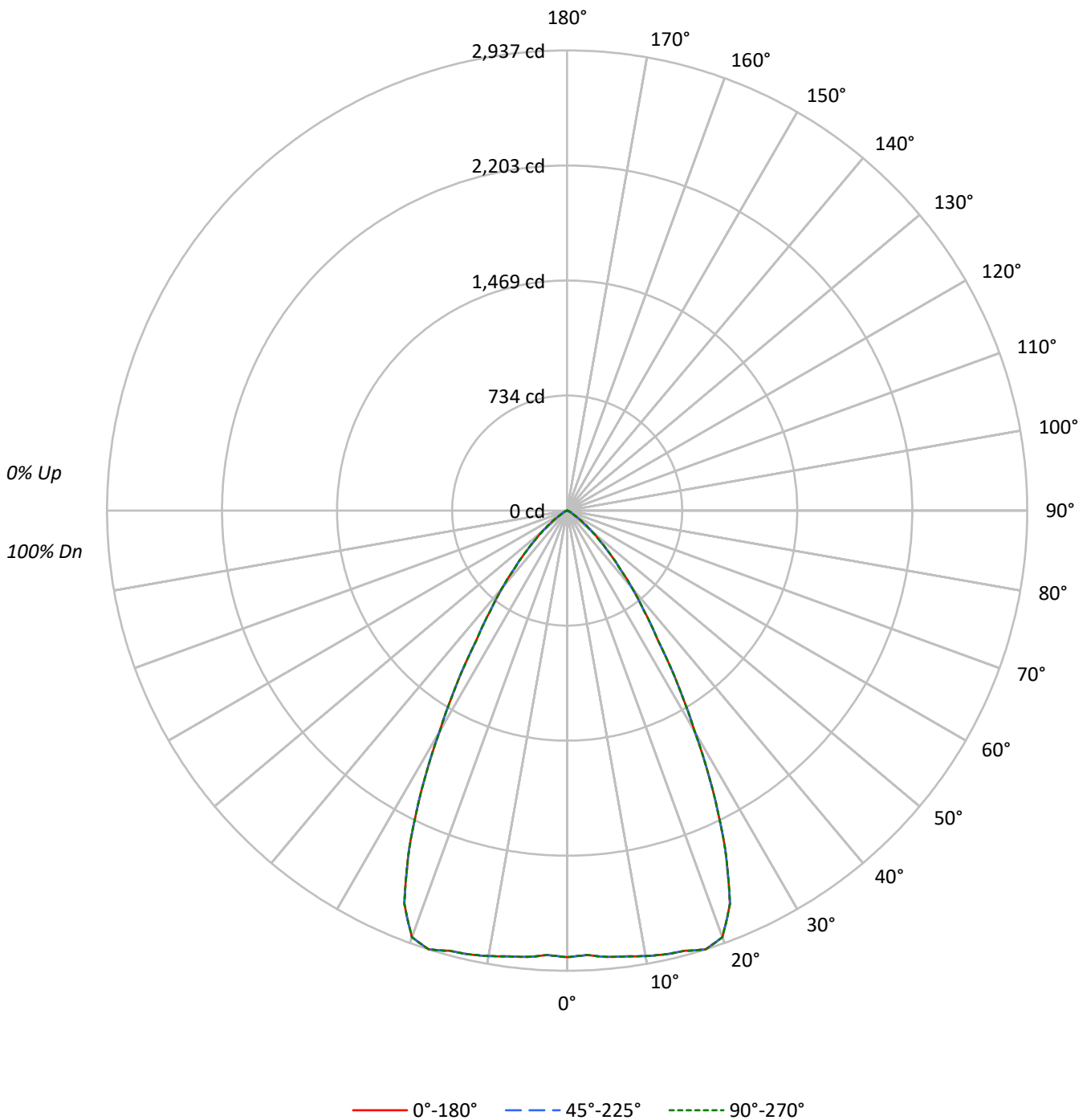
**Summary**

Lumens per Lamp: 8000 (1 lamp)  
Luminaire Lumens: 3235.8 lumens  
Efficiency: 40.4%  
Efficacy: 25.1 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.93  
Luminous Opening: (L: 0 ' x W: -0.58 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	48	48	48	48	47	47	47	47	45	45	45		43	43	43		41	41	41	40
1	46	45	44	43	45	44	43	42	42	41	41		41	40	39		39	39	38	38
2	43	41	40	38	42	41	39	38	39	38	37		38	37	36		37	36	35	35
3	41	38	36	35	40	38	36	34	37	35	34		36	34	33		35	34	33	32
4	39	36	33	31	38	35	33	31	34	32	31		33	32	31		33	31	30	30
5	37	33	31	29	36	33	30	29	32	30	28		31	30	28		31	29	28	27
6	35	31	28	27	34	31	28	27	30	28	26		29	28	26		29	27	26	25
7	33	29	26	25	32	29	26	25	28	26	24		28	26	24		27	25	24	24
8	31	27	25	23	31	27	25	23	26	24	23		26	24	23		26	24	23	22
9	30	26	23	21	29	25	23	21	25	23	21		25	23	21		24	22	21	21
10	28	24	22	20	28	24	22	20	24	21	20		23	21	20		23	21	20	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	273.6	8.5	3.4
10°-20°	825.3	25.5	10.3
20°-30°	1067.7	33.0	13.3
30°-40°	657.4	20.3	8.2
40°-50°	298.6	9.2	3.7
50°-60°	88.8	2.7	1.1
60°-70°	21.0	0.6	0.3
70°-80°	3.4	0.1	0.0
80°-90°	0.0	0.0	0.0
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	2166.7	67.0	27.1
0°-40°	2824.1	87.3	35.3
0°-60°	3211.4	99.2	40.1
0°-90°	3235.8	100.0	40.4
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	3235.8	100.0	40.4

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2850	2850	2850	2850	2850	
5°	2860	2860	2860	2860	2860	274
15°	2909	2909	2909	2909	2909	825
25°	2388	2388	2388	2388	2388	1068
35°	1011	1011	1011	1011	1011	657
45°	372	372	372	372	372	299
55°	90	90	90	90	90	89
65°	21	21	21	21	21	21
75°	2	2	2	2	2	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2850	2850	2850	2850	2850	2850	2850	2850	2850
2.5°	2839	2839	2839	2839	2839	2839	2839	2839	2839
5°	2860	2860	2860	2860	2860	2860	2860	2860	2860
7.5°	2870	2870	2870	2870	2870	2870	2870	2870	2870
10°	2887	2887	2887	2887	2887	2887	2887	2887	2887
12.5°	2901	2901	2901	2901	2901	2901	2901	2901	2901
15°	2909	2909	2909	2909	2909	2909	2909	2909	2909
17.5°	2937	2937	2937	2937	2937	2937	2937	2937	2937
20°	2897	2897	2897	2897	2897	2897	2897	2897	2897
22.5°	2716	2716	2716	2716	2716	2716	2716	2716	2716
25°	2388	2388	2388	2388	2388	2388	2388	2388	2388
27.5°	2015	2015	2015	2015	2015	2015	2015	2015	2015
30°	1628	1628	1628	1628	1628	1628	1628	1628	1628
32.5°	1310	1310	1310	1310	1310	1310	1310	1310	1310
35°	1011	1011	1011	1011	1011	1011	1011	1011	1011
37.5°	808	808	808	808	808	808	808	808	808
40°	641	641	641	641	641	641	641	641	641
42.5°	495	495	495	495	495	495	495	495	495
45°	372	372	372	372	372	372	372	372	372
47.5°	276	276	276	276	276	276	276	276	276
50°	205	205	205	205	205	205	205	205	205
52.5°	140	140	140	140	140	140	140	140	140
55°	90	90	90	90	90	90	90	90	90
57.5°	54	54	54	54	54	54	54	54	54
60°	32	32	32	32	32	32	32	32	32
62.5°	26	26	26	26	26	26	26	26	26
65°	21	21	21	21	21	21	21	21	21
67.5°	16	16	16	16	16	16	16	16	16
70°	12	12	12	12	12	12	12	12	12
72.5°	5	5	5	5	5	5	5	5	5
75°	2	2	2	2	2	2	2	2	2
77.5°	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)